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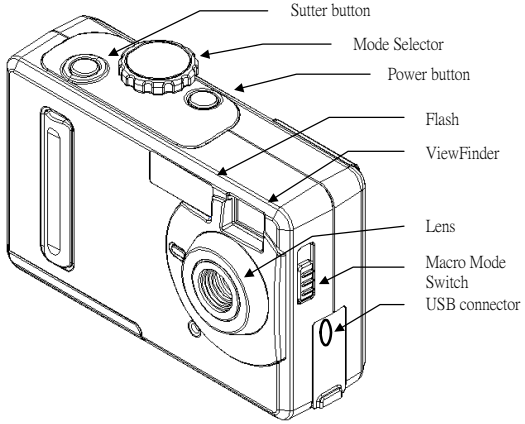
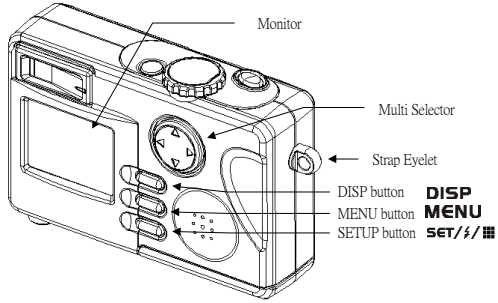
Product Overview

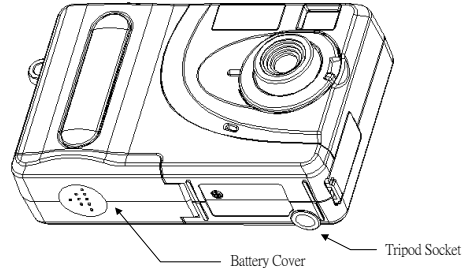
Front View



Back View

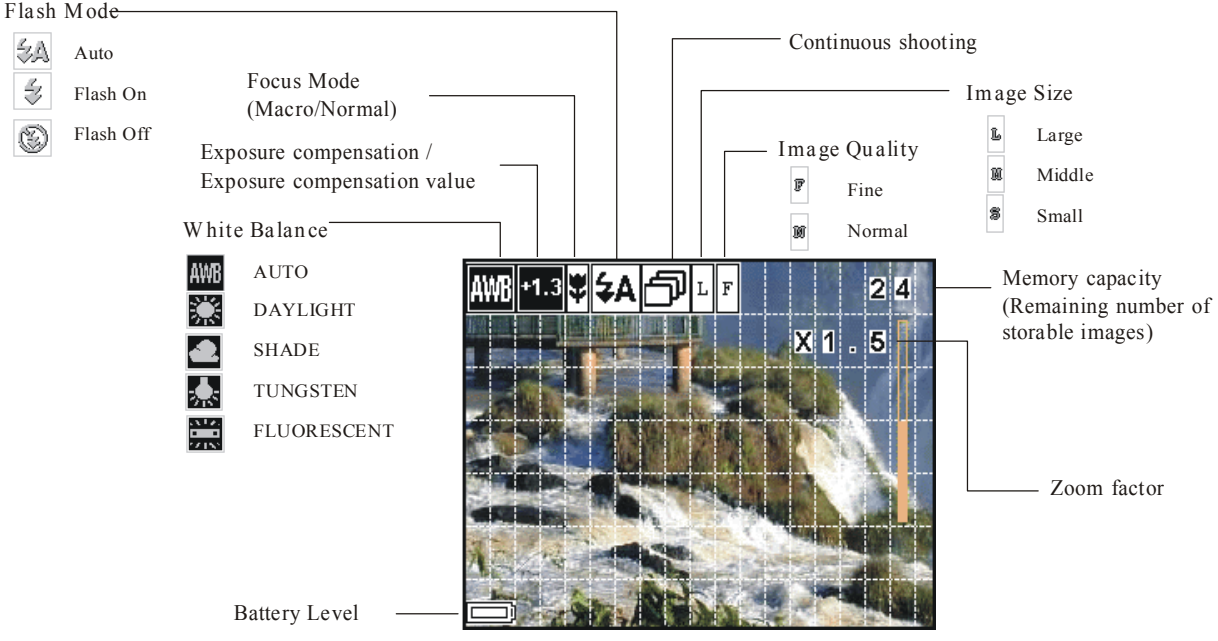


Bottom View

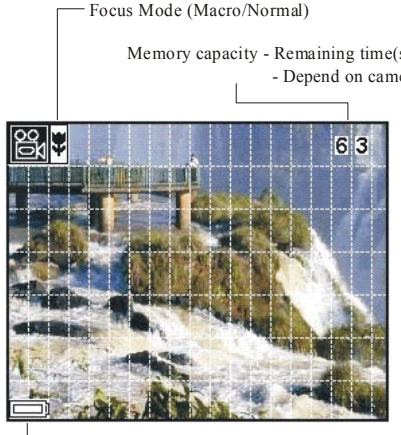


Monitor

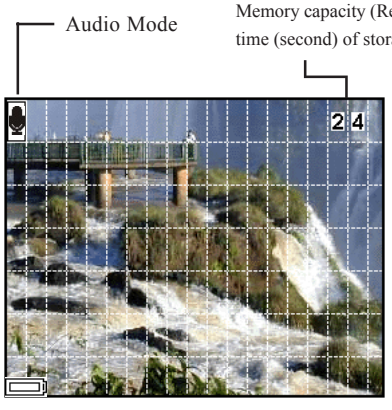
Photo Mode



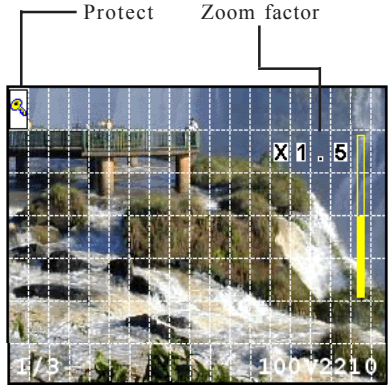
Video Mode



Audio Mode

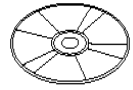
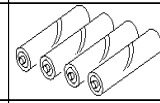


Playback Mode



1. Getting Started

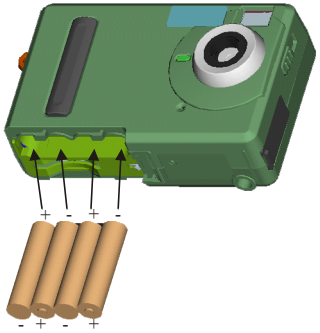
1-1 Check List

	Camera		User Manual
	CD-ROM		USB Cable
	Wrist Strap		4x AAA Batteries
	Soft Case		

1-2 Installing the Batteries

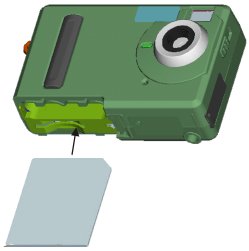
4 x AAA Alkaline batteries are supplied with the camera. Please insert the batteries according to the following steps:

1. Open the camera battery door by pushing it toward the OPEN direction.
2. Insert the batteries as shown, ensuring you follow the +/- signs correctly.
3. Close the battery door by pushing it backwards.



1-3 Installing the memory card

Turn the camera off, open the battery cover, and gently insert the memory card into the bottom until it is fully seated.



The label on the memory card should face the back side of the camera and make sure the card edge is inside the slot.

The 8M onboard memory and estimated capacities (Recordable Images, Audio and Video) shown as below:

Use 8M Onboard Memory		
	Fine	Normal
2048 x 1536	9	12
1600 x 1200	12	16
800 x 600	37	51
Video	63 sec. at 320 x 240	
Audio	about 29 min.	

1-4 Turning the Camera On and Off

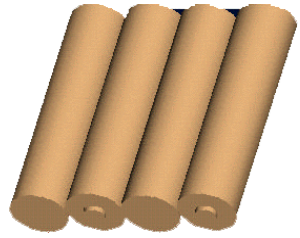
Press the power button for about 3 seconds to turn the camera on. The the Power LED will keep “Red” about for 3 seconds then change to “Green”.

You can start to take pictues or set up the camera when LED becomes “Green”. Press the power button again to turn the camera off.

1-5 Checking the battery level

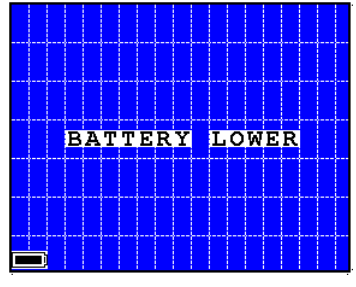
Check the battery power level before taking pictures. Turn the camera on and check the battery power level on the bottom left of the LCD monitor.

You can see the battery level sign on the following mode: Manual photo mode, Auto photo mode, Video mode and Audio mode.



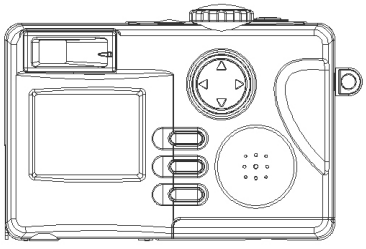
	Battery is full
	Battery power is low (Please change batteries)
	Battery is extreme low (Change battery as soon as possible. And the camera will show it the under screen)

When the battery power level is low, you will see the camera screen shows as below.



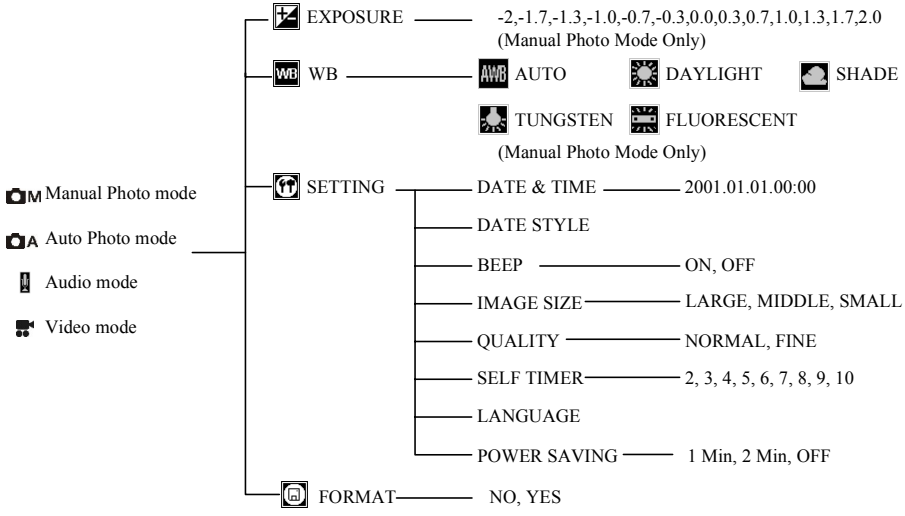
1-6 Automatic power off function

Your camera is designed to switch to power saving status automatically and save battery life after one minute or two minutes of non use. Press any button to reactivate the camera or power turn off after 60 seconds in power saving status.



2. Camera Setting

Before we start to introduce how to set up the camera, please see the structure of the setting and you can quickly familier with your camera:



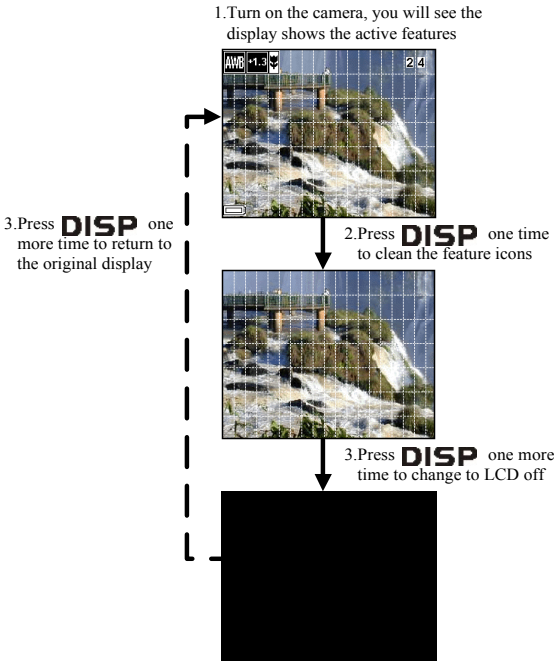
2-1 Checking Camera Status

Power the camera on, browse the LCD monitor in the back side of the camera to check which settings are active. If feature icon is not displayed, it means that the particular feature is not activated.

LCD Display Features			
Macro		Burst Sanpshot	
Auto Flash		X 2 Zoom factor	
Flash On		Self-Timer	
Flash Off		Audio	
White Balance		Battery	
AWB	Auto	Full	
	Daylight	Low	
	Shade	Extreme Low	
	Tungsten		
	Fluorescent		
Image Size		Image Quality	
L	Large	F	Fine
M	Middle	N	Normal
S	Small		

2-2 Display Setting

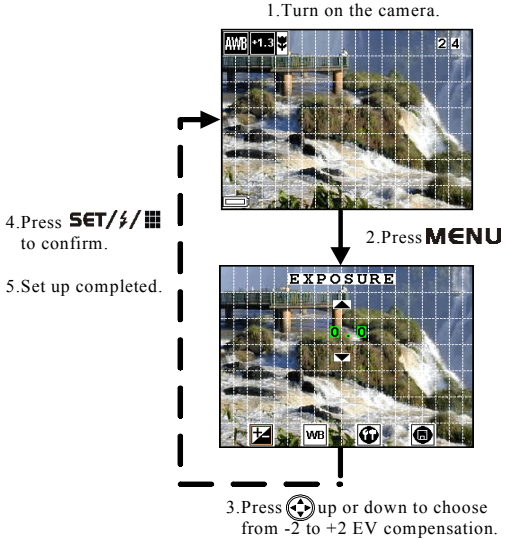
Press **DISP** to set up the LCD display On/Off



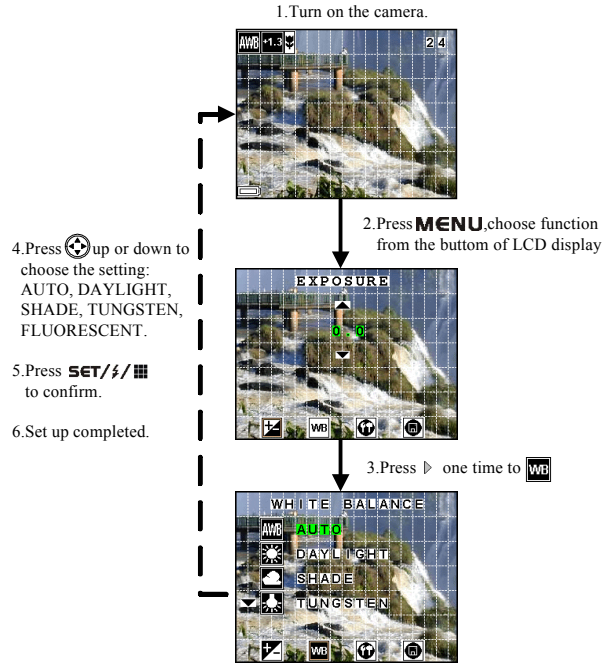
2-3 Function Setting

Press **MENU**, and choose the functions (+/-, WB, ,) you want to set up from the LCD monitor

2-3-1 Exposure Compensation Setting



2-3-2 White Balance Setting

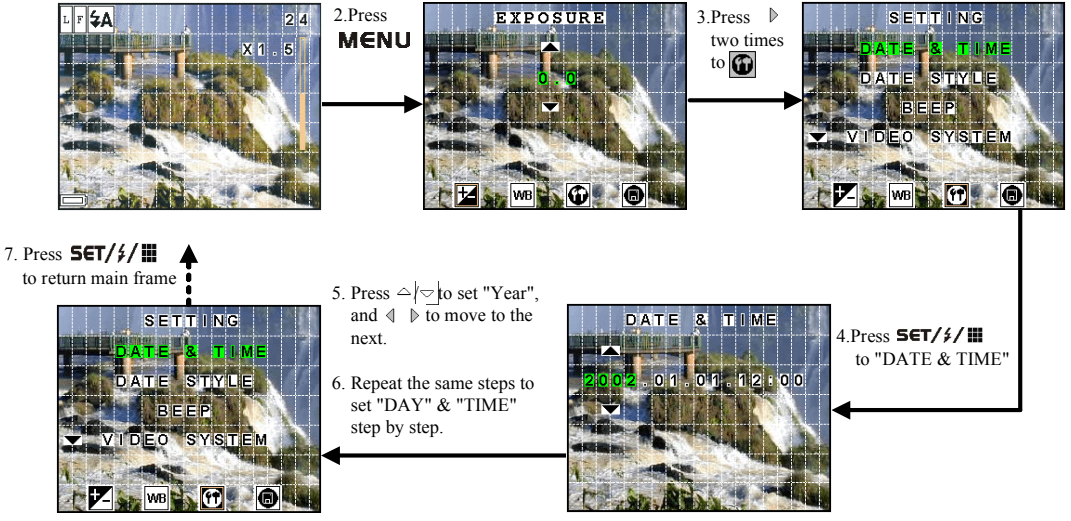


2-3-3 Setting

There are 8 different settings included in Auto Phot mode/ Manual Photo Mode/Video Mode/Audio Mode. Please choose the items you would like to set up and see the following instruction to complete the settings.

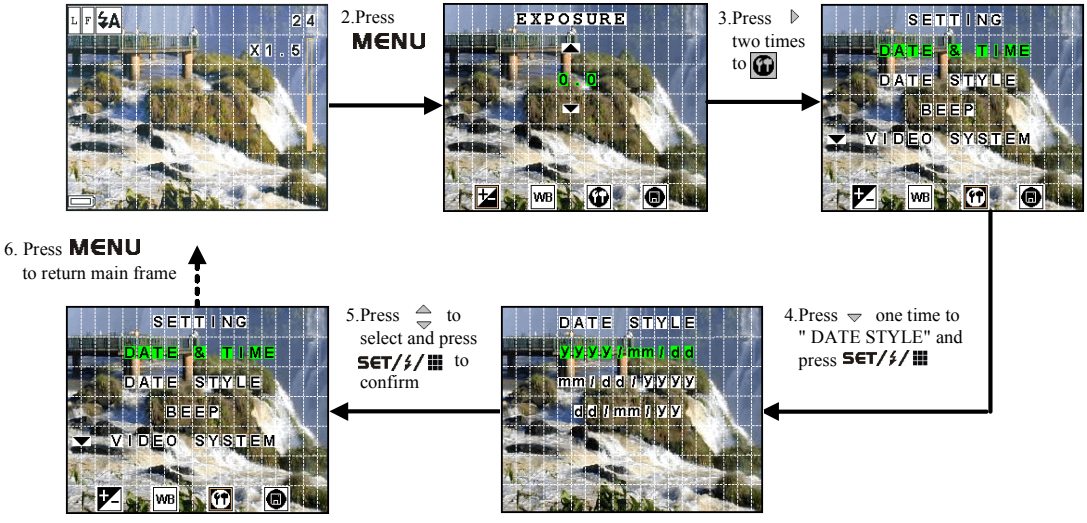
- **Date and Time Setting**

1.Turn on the camera. (in Auto Photo Mode)



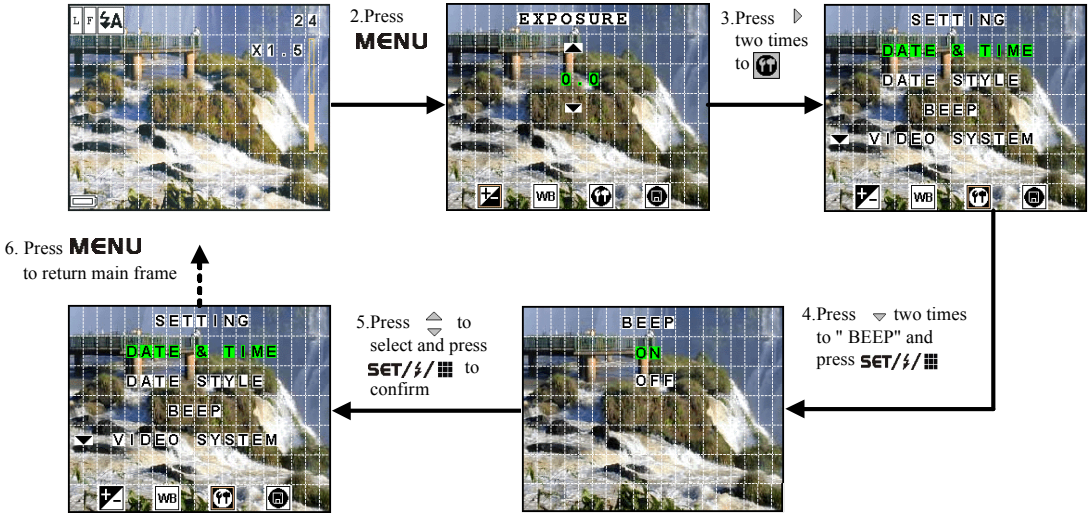
● Date Style Setting

1.Turn on the camera. (in Auto Photo Mode)



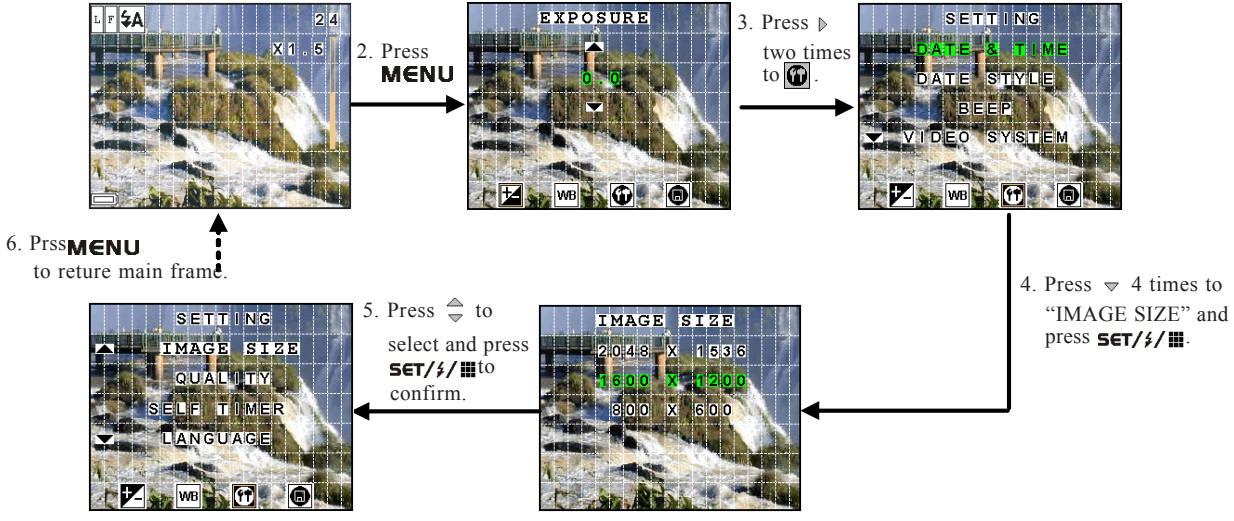
● Beep Setting

1.Turn on the camera. (in Auto Photo Mode)



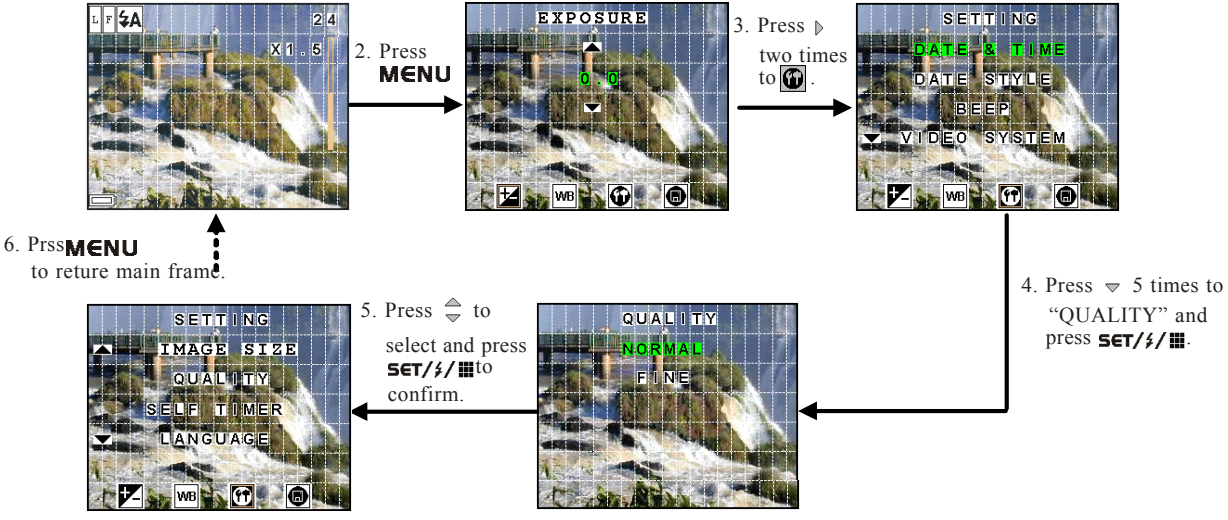
● Image Size

1. Turn on the camera (in Auto Photo Mode)



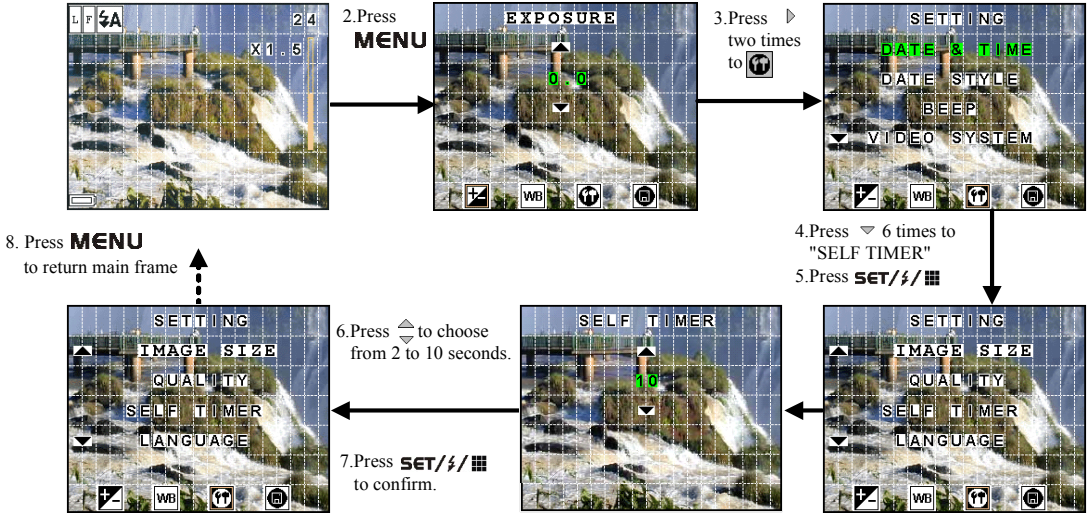
● Quality

1. Turn on the camera (in Auto Photo Mode)



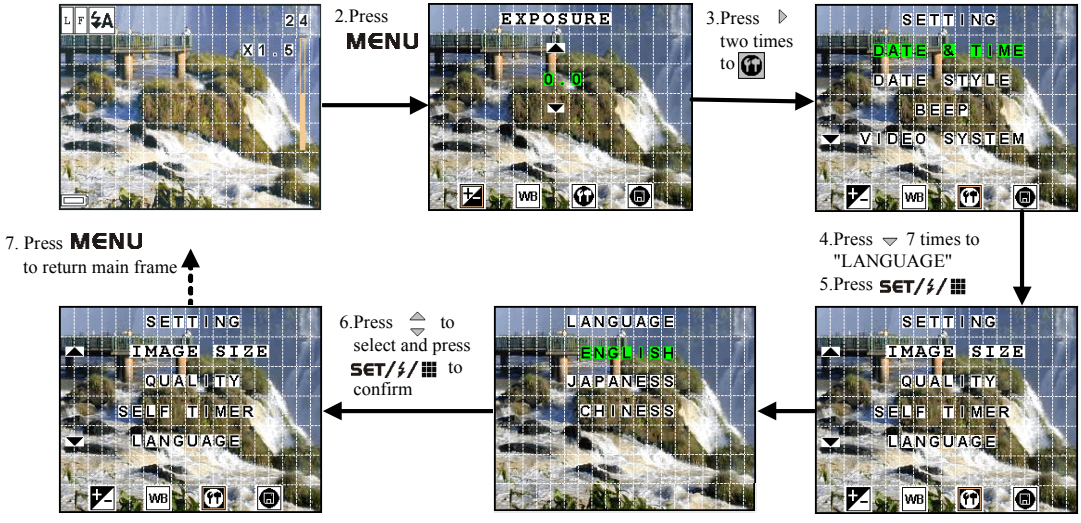
● Self Timer

1.Turn on the camera. (in Auto Photo Mode)



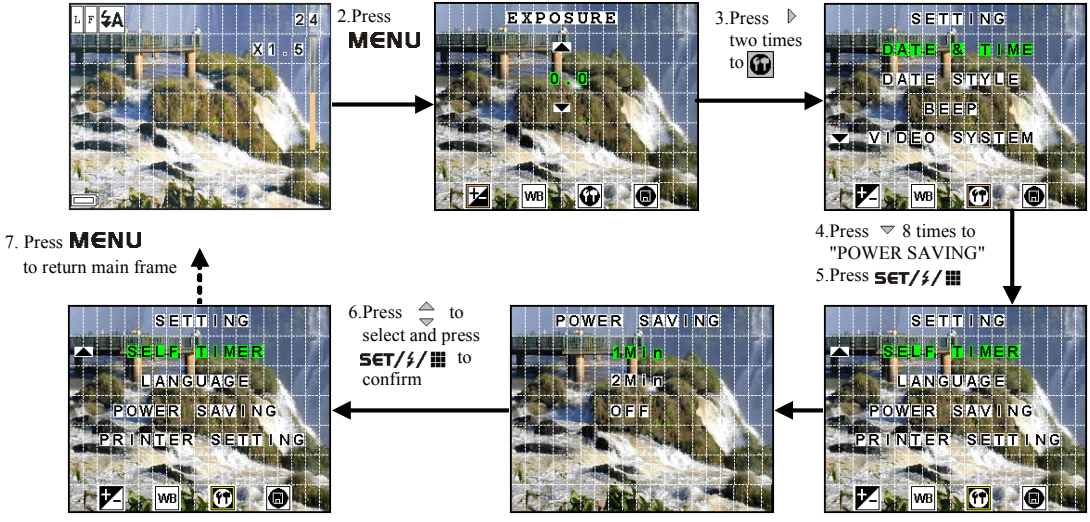
Language Setting

1.Turn on the camera. (in Auto Photo Mode)

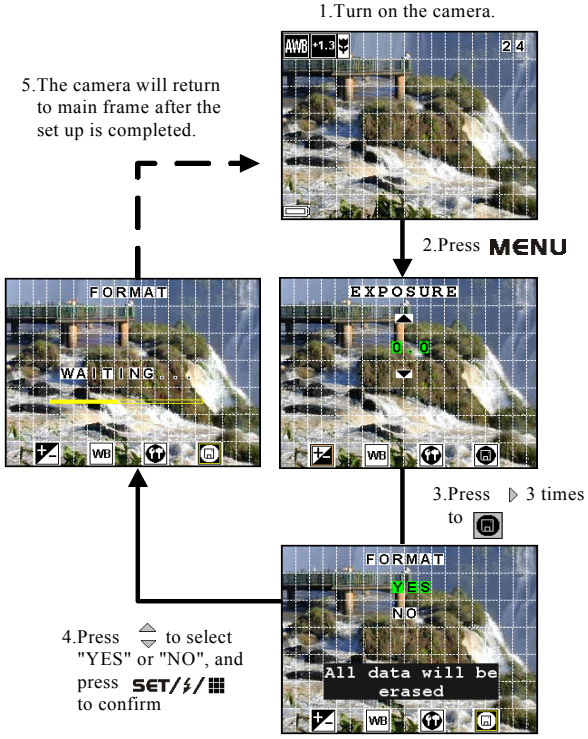


Power Saving Setting

1.Turn on the camera.



2-3-4 To Format a Memory Card

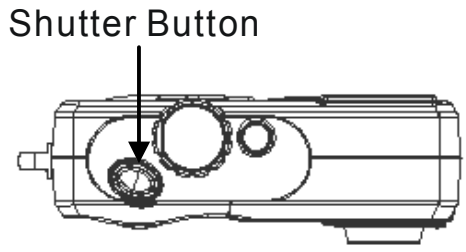


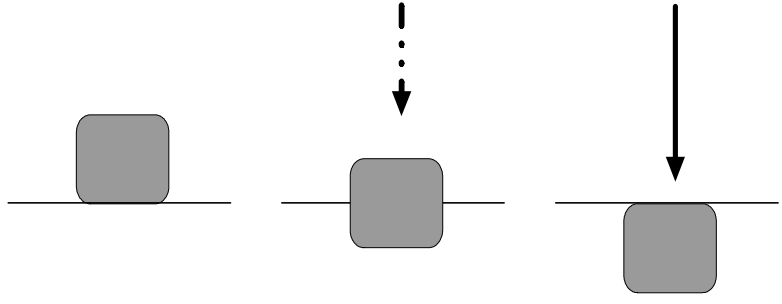
3. Taking and Managing the Pictures

3-1 Taking a Picture

1. Turn on the camera, and set the mode dial switch to “Photo” mode.
2. Frame photographs by using viewfinder or LCD monitor.
3. Press and hold the shutter button halfway down to lock AE and check the image. To cancel the recording, release the shutter button.
4. Hold the camera steadily and press the shutter button fully down.

Press the shutter button shown as below.



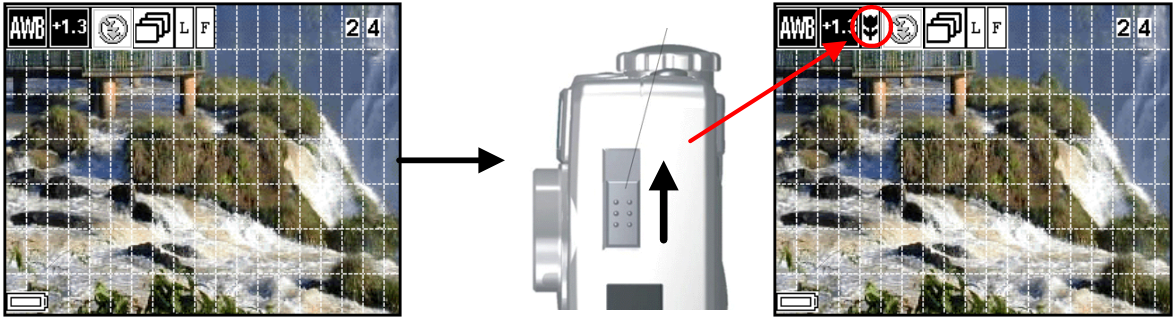


Before releasing shutter Half press Fully depressed

3-2 Recording Macro Pictures

When you want to take a picture in a short distance you must set the selector to marcro.

You can frame close object at the distance of 20cm and take pictures.

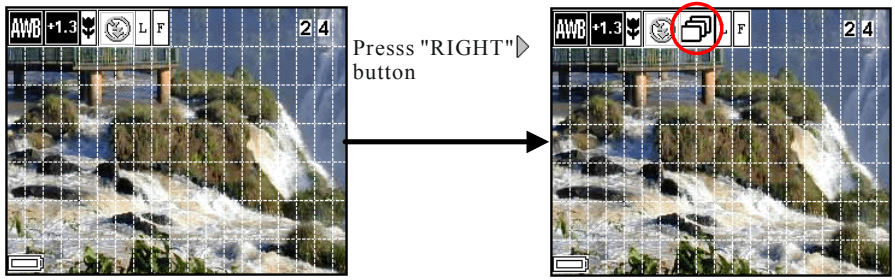


3-3 Recording Continuous Pictures

1. Turn on the camera, and press the “RIGHT” button ▷ to set burst mode.

2. Repeat “Take a Picture” to take pictures. When taking pictures at burst mode the camera will take five pictures continuously at 800 x 600.

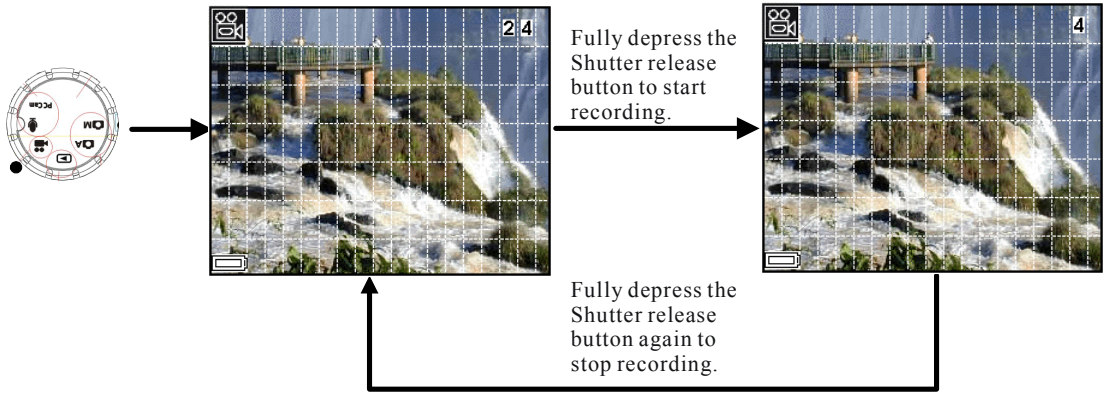
Remark: You can use the burst mode at Manual Photo A and Auto Photo M mode.



3-4 Recording a Video clip

1. Switch the mode dial to mode and turn on the camera.
2. Fully depress the Shutter release button to start recording your movie.
3. Fully depress the Shutter release button again to stop recording.

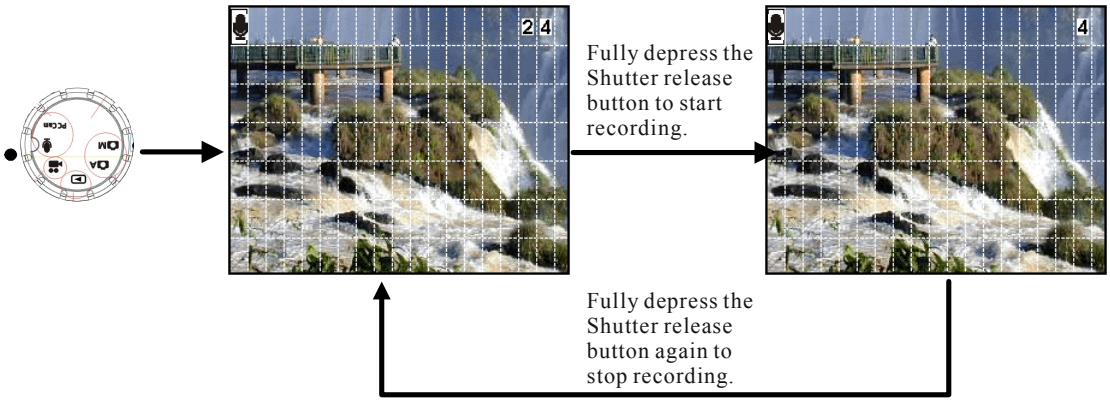
Remark : The camera records movies up to 15 frames per seconds in CIF size (320 X 240 pixels). The file is recorded in AVI format (DOS file extension ".avi").



3-5 Recording a Audio clip

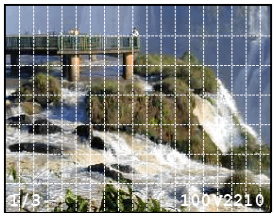
1. Switch the mode dial to mode and turn on the camera.
2. Fully depress the Shutter release button to start recording your audio.
3. Fully depress the Shutter release button again to stop recording.

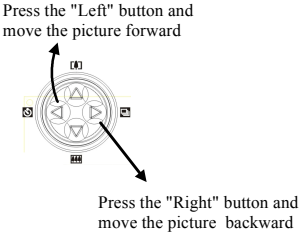
Remark : The camera records audio at 8KHz, 4 bit.



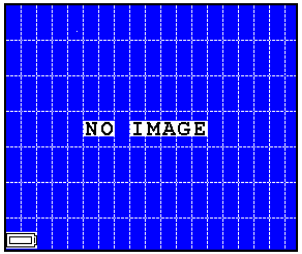
3-6 Previewing the Pictures

1. Switch the mode dial to ▶ mode and turn on the camera.
2. You can preview the pictures you took and use the multiselector to change the images.



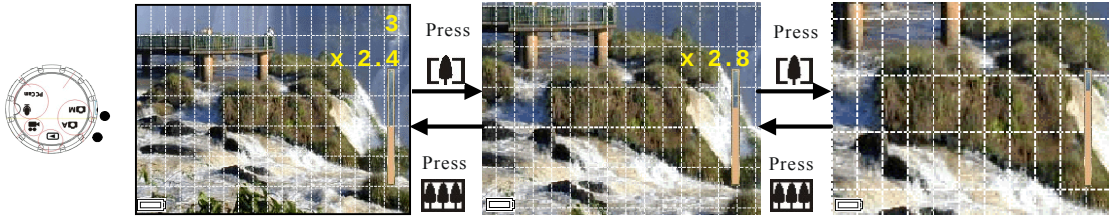


3. When there is no image in the memory card you will see the screen shown as below.



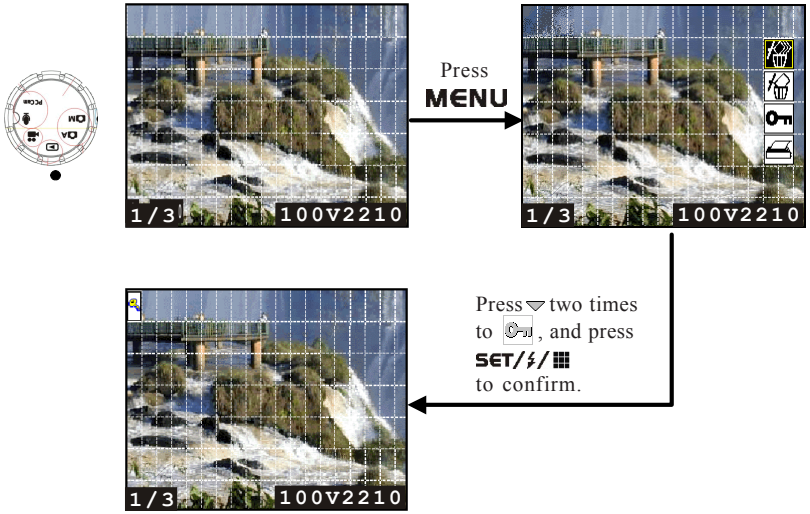
3-7 Using Digital Zoom

1. Switch the mode dial to A mode or M mode and turn on the camera.
2. Press the multi-selector [T] or [W] to select the zoom rate up to 4.0x (0.2 step), this camera build in with 4 times digital zoom.



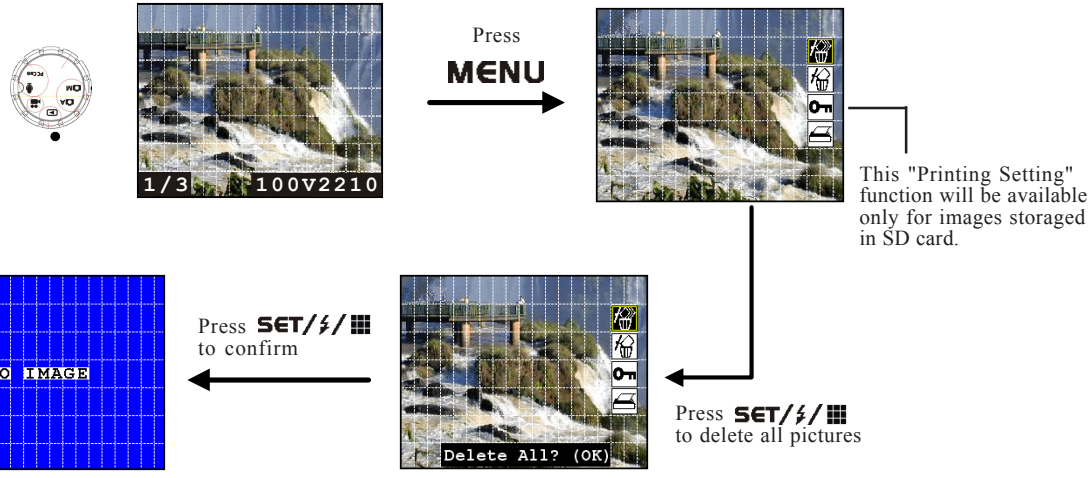
3-8 Protect Picture(s) Against Deletion

1. Switch the mode dial to ▶ mode and turn on the camera.
2. Press **MENU** button and then press ▽ 2 times to select 🔑 function.
3. After setting this image will not be deleted from camera.



3-9 Deleting Picture(s) from the Camera

1. Swtich the mode dial to ▶ mode and turn on the camera.
2. Press **MENU** button and then use ▼ to select 🗑 or 🗑 to delete one picture or all pictures.

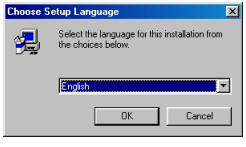


4. Installing the Software onto a Computer

4-1 Installing the Software

- Before you installing the software, remember to close all other software applications you are using on your computer.
- Insert the CD supplied into the CD-ROM driver of your computer
- The user interface screen of the CD will automatically be launched.
- Please follow the instructions to complete the installation

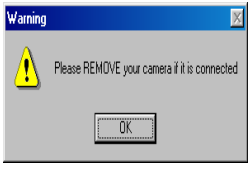
1.Choose the language you want to use for the installaion, then click "yes"



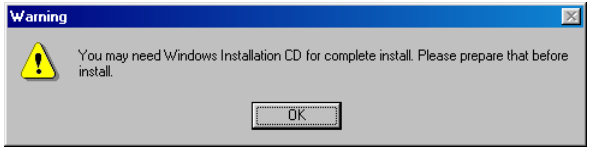
2.The driver will automatically start to run the setup

3.Make sure your USB port on the computer is enable

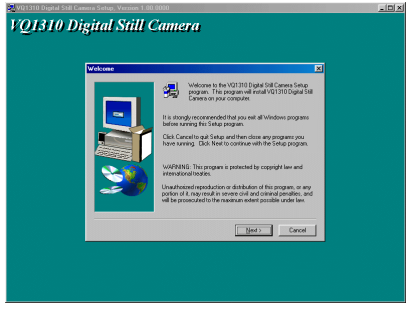
4.Make sure your camera is not connected to the computer



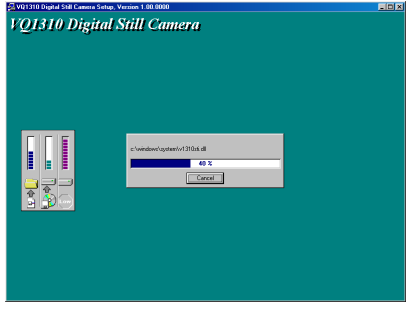
5.Prepare the Windows installation CD on hand in case needed while the installation



6.The system is ready to start setup, click “ next” if you want to complete the installation, click “cancel” if you want to abort



7.Start to install, please wait



8.Installtion completed.

4-2 Computer system requirements

We recommend the following minimum requirements for transferring and editing the images from camera to personal computer:

Computer	PC/AT compatible
CPU	Pentium III 500MHz, AMD K7-550 or equivalent processor
OS	Windows98/98SE, Windows ME, Windows2000 or XP
RAM	64MB or more
Hard Disk Space	200MB free disk space
Monitor	640 x 480 pixels or greater with 16-bit RGB or more, color (800 x 600 pixels or more, full color monitor recommended)
CD-ROM Driver	Required for installation
Interface	USB interface
Accessories	Standard mouse, keyboard and stereo speakers

5.Viewing & Transferring Pictures

5-1 Before you transfer pictures

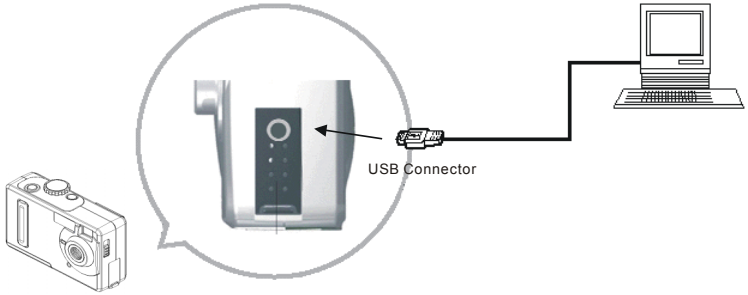
Make sure you have installed the software from the CD before you start to transfer your pictures to your PC, please refer to chapter 4 for the software installation.

5-2 Connecting to your computer

This camera is equipped with a Universal Serial Bus (USB) for Win 98, Win 98SE, Win 2000, Win Me and Win XP that is capable of direct connection to your computer via a USB cable. Alternatively, you can insert the memory card in a PC card slot or card reader, where it will function as an additional disk

1.Open the USB connector/Video output connector cover of the camera

2.Connect the USB cable provided as shown



5-3 Transferring & Viewing the Pictures on a computer

Image files recorded with your camera will generate the different file name by recording mode:

Folder name : 100V2210

File name: DSCIOOOO.XXX

DSCI stands for default file name for all image recorded

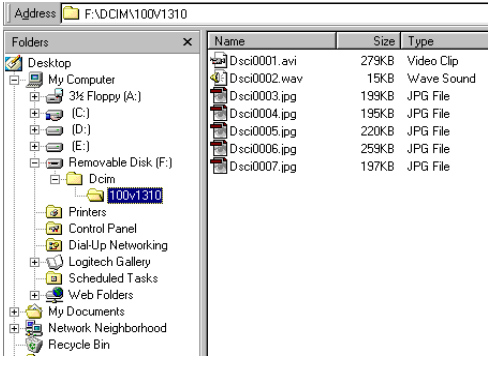
OOOO stands for the serial number for the image recorded

XXX if XXX shows JPG, it is for still image

if XXX shows AVI, it is for moving image

if XXX shows WAV, it is for audio file

For Win 98 users, the drive recognizing the camera is "E"



6. Using your camera as a Web Cam

6-1 Specification for Web Cam Mode

Video Resolution	160 x 120, 176 x 144, 240 x 180, 320 x 240, 352 x 288, 640 x 480
Video Format	RGB24,
Frame Rate	15 fps (VGA), 30fps (CIF), can be achieved by Pentium III 500 MHz, 64 MB Ram
Exposure Range	On / Off selectable
White balance	Auto or Manual (4-mode manual : daylight/shade/tungsten/fluorescent)
Speaker	Build-in

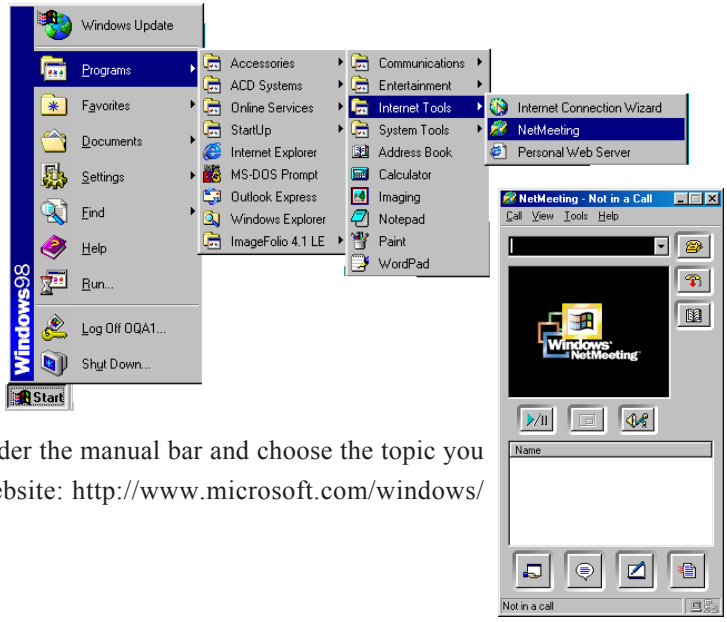
6-2 Setting up

1. Connect your camera to the USB cable.
2. Connect the other end of your USB cable to an available USB port on your PC.
3. Put your camera on the top of your PC monitor or another flat surface.

6-3 Making a call

1. . Double click the **NetMeeting** icon on the desktop or select the **NetMeeting** icon from the windows start manu.

2. . Type in the IP address, computer name or telephone number for the person you want to call and press the **Place Call** button. To find your own IP address, go to **Start** and click **Run**, Type in “winipcfg” and click **OK**, IP configuration window will appear and you can see your IP address.



3. . If you need further help on how to use Microsoft NetMeeting, select the help under the manual bar and choose the topic you need. Or you can visit the following website: http://www.microsoft.com/windows/netmeeting

7. Troubleshooting Problems

The troubleshooting guide is designed to help you to solve the abnormal problems with your camera. For any problem continues and can not be handled by yourself, please contact your local service center for support. See your registration card for contact details.

7-1 Troubleshooting on camera:

Operation	Problem	Checking Points	Solution
Power	Power does not turn on	●Battery level is low or dead ●Battery is incorrectly installed	●Replace new battery ●Install the battery prefer to instruction
	Power turns off immediately	●Battery level is low or dead ●Auto power-off function activated	●Replace battery ●Turn the power on
Shooting	Image is not recorded when the shutter button is depressed	●Mode selector is set to off ●Memory card is not compatible ●Memory card is full ●Flash unit is being charged	●Set the mode selector to on ●Choose a correct memory card ●Delete some images ●Wait till the charging finished
	LCD is blank or images on the LCD are not clear	●Bright sunlight or high-intensity light environment ●LCD or Lens is dirty or covered by fingerprints	●Use the view finder to shoot or move to a location with less light ●Clean the LCD or Lens with light cloth
	Subject is not in focus	●Macro mode being used for normal shooting ●Normal mode being used for macro image	●Set the setting to normal for portraits and scenery ●Set the setting to macro for macro images

7-1 Troubleshooting on camera (continued):

Operation	Problem	Checking Points	Solution
Shooting	Recorded pictures can not be saved in memory card	●Camera power off before the saving is complete ●Removing the memory card before the saving is complete	●Replace battery ●Do not remove the memory card before the saving is complete
	Image color is unnatural	●The photo was taken under the conditions in which white balance could not be adjusted.	●Try to preset white balance
	The flash does not work	●The flash is set to flash-off ●The mode selector is set to Video	●Set the flash to auto or flash on ●Set it to photo mode
Playback	Color is different from the LCD screen while recording	●Bright sunlight or high-intensity light is shining directly into the lens during recording	●Move to a location or place the camera to prevent lens directly from shine
	Pictures are not displayed	●Mode is not set to play ●The memory card does not contain picture data ●All image data in the memory card are deleted ●Memory card has been formatted a memory card with non-DCF pictures recorded with another camera is loaded in the camera	●Change mode to play ●Change memory card or using another digital camera which support non-DCF pictures
Others	Can not transmit data to computer	●The camera is not correctly connected to the computer	●Refer to manual chapter 4.1

7-2 Error Message

Message	Problem	Solution
No Card	Memory card is not inserted or is not correctly inserted	Insert memory card correctly
Card is not formatted	Memory card is not formatted for this device	● Select Format function ( )and format the memory card ● Use a correctly formatted memory card
Memory Full	Memory card does not have sufficient memory	● Delete or reduce number of images ● Transfer the images you want to save to a computer ● Insert a new memory card
This card can not be used	● Wrong card ● Memory card may be physically damaged	● Check and make sure the card is compatible with this device ● Check that there is no dirt in the connector or contact with service center for repair, otherwise, insert a new memory card if the damaged can't be recovered.
Battery Low	Battery is low	● Insert new batteries
No image	●No images in the memory card ●Wrong image format	● Insert a memory card with images ● Do not use a memory card with non-DCF images

8. Appendix

8-1 Technical Specifications

Sensor	2.1M CMOS
Lens	5G lens with macro Effective focal length : 8.47mm FNO: F2.8
View Finder	Field of View: 85%
Image Size (pixel)	2048 x 1536 1600 x 1200 800 x 600
Video Capture Resolution	320*240 w/audio recording, up to 15 frames per second
Memory Capacity	Internal: 8MB NAND Gate Flash Memory External: SD memory card
Picture Capacity (Quality setting : Fine)	Please refer to Page 9
Video Capacity	63 sec. video recording at 320*240
Audio Capacity	voice recording (about 29 min.)
Exposure Range	Auto & Manual : AE range, -2EV to +2EV in 1/3 steps

8-1 Technical Specifications (continued)

White balance	Auto or Manual (4-mode manual : daylight/shade/tungsten/fluorescent)
Audio Format	IMA-ADPCM, 8KHz, 4 bit
Burst Mode	5 pictures per shot, VGA size
Flash Strobe	3-mode: Auto / On / Off, effective distance: 2.0 meters
LCD Display	Color, 1.5" TFT panel, preview frame rate: 30fps
Environment	Operating Temperature: 0 to 40 ^{o}C (30 –104 ^{o}F) Storage Temperature: -20 to 60 ^{o}C Operating Humidity: 15 –90 % RH Storage Humidity: up to 90% RH
Power requirements	4 x batteries (1.5V Alkaline or 1.2V NiCd or Ni-MH rechargeable)
Dimension	97 x 28 x 63 mm (W x D x H)
Weight	Approx. 110g (without battery)
Supplied Accessories	User manual / CD ROM (English, Spanish, German, French, Italian, Dutch), Wrist strap, 4 x AAA batteries, Soft case, USB cable

8-2 Operation, Safety and Maintenance

8-2-1 Operation

Operating your camera within the following environmental conditions, otherwise, the battery life or image quality may be affected:

0-40 °C (32-104 °F)

15-90% relative humidity

8-2-2 Safety

- Do not look at the sun through the viewfinder, this could cause permanent visual impairment.
- Do not walk while looking through the viewfinder, this could result in a fall or other injury.
- Do not use in the presence of flammable gas to prevent explosion or fire.
- Turn off immediately in the even of malfunction, such as smoke or unusual smell from the camera or adaptor. Turn off and remove the batteries and ask service center for inspection.
- Do not disassemble by yourself to prevent any injury by the internal parts. Turn off and remove the batteries and ask service center for inspection if you have problem.
- Do not place camera strap around neck
- Keep out of reach of children

8-2-3 Maintenance

- Keep dry, never immerse any part of the camera or its accessories into any fluid or liquid.

- Keep clean, wipe off any sand, salt, dust or stains with a a soft dampened cloth.
- Do not drop and prevent strong shocks or vibration.
- Keep away from strong magnetic fields, such as TV or radios.
- Always disconnect the camera from your PC or TV before cleaning it. Do not unplug the device or remove the battery while camera is on.

8-3 Using Your Batteries

- Batteries should be replaced by an adult or under adult supervision,
- Rechargeable batteries are only to be charged under adult supervision.
- Non-rechargeable batteries are not to be recharged.
- Insert the batteries with the right instruction or polarity.
- Do not mix up the different types of batteries or new and used batteries
- Do not dispose the batteries in fire
- Remove the batteries from the camera if they are exhausted or not in use.

These instructions should be retained for future reference

8-4 Regulatory Information

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference

- This device must accept any interference received, including interference that may cause undesired operation.

8-4-1 Federal Communications Commission (FCC) Radio Frequency Interference Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/television technician for help.

8-4-2 Attention

Any change or modification made to this unit that are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.